

Occupational Therapy Toolkit

Parkinson's Disease

Functional Limitations:

ADL, IADL, work and leisure impairment

Functional mobility impairment

Resting tremor with pill rolling quality, affects head and all limbs, occurs at rest

Action or postural tremor occurs during movement

Cogwheel rigidity/muscle stiffness results in back and neck pain, cramping and soreness of muscles, contracted muscles, reduced activity tolerance and endurance, stooped posture and flexed limbs

Bradykinesia - slow movements, incomplete movement, difficulty initiating movements and sudden stopping of ongoing movement, difficulty doing two tasks at the same time, reduced arm swing, micrographia, reduced eye blinking, reduced facial expression (non verbal messages are misinterpreted or lost), drooling, difficulty getting out of a chair, difficulty rolling in bed, difficulty turning around and turning corners

Postural instability - forward flexion of neck, hips, knees and elbows, poor balance, difficulty making turns or abrupt movements, difficulty with transitional movements

Gait disorders - freezing episodes, difficulty initiating gait, difficulty slowing down and stopping, festinating gait, shuffling gait with small steps, propulsion of gait

Fall risk

Fear of falling

Memory difficulties and slowed thinking

Dementia in 30-40%

Environmental barriers

Knowledge deficit

Dysphagia results in weight loss, difficulty swallowing solid foods, difficulty chewing and moving food to back of mouth

Dysarthria - reduced phonation, distorted sounds, prosodic disorder

Depression

Other symptoms and conditions - constipation, sleep disturbances

Rating Scales:

1. The Unified Parkinson's Disease Rating Scale (measures clinical course over time)
2. The Hoehn and Yahr Staging (quantifies disease severity)
3. The Schwab and England Activities of Daily Living

All three available at: www.neurosurgery.mgh.harvard.edu

4. Parkinson's Disease Questionnaire PDQ-39 (quality of life instrument)
www.pdmed.bham.ac.uk

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Occupational Therapy Intervention:

ADL, IADL, work and leisure training including but not limited to...

Recommend and/or provide adaptive equipment and alternative methods to compensate for bradykinesia

Electric warming tray to keep food hot, loose fitting clothes, elastic laces or Velcro closers on shoes, pull over tops, button hooks, key turners, walker trays

Modifications to reduce action tremors during tasks

Emphasis on engagement in and safe performance of activities

Reinforce medication management

Assist patient in developing a system to remember medications (pill box, telephone reminders, lists, pictures)

Teach strategies to improve handwriting and computer skills

Teach energy conservation principles

Encourage to perform ADL's during medication "on" times

Functional mobility training

Train in proper transfer techniques and bed mobility skills as they relate to ADL and IADL tasks. Provide elevated toilet seats, bath chairs, cushions in chairs or risers placed under furniture legs, bedrails, trapeze, grab bars in bathroom

Instruct in safe walker use and transporting items (walker bag or tray)

Instruct in wheelchair mobility, car transfers and community mobility skills

Provide graded upper body reciprocal therapeutic activities and exercises to improve ROM and strength prevent contractures, improve posture and promote extension

Instruct in pain management techniques

Teach stress management and relaxation techniques, educate in use of superficial heat and cold, instruct in proper posture

Facilitate movement by teaching cognitive strategies that make use of alternative sensory cues

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Educate regarding falls risk and prevention strategies

Educate regarding the common triggers for falls in PD (changing direction, turning, distractions, carrying objects, doing two tasks at the same time, hurrying, reaching up such as into a cabinet, reaching down such as to pick up a newspaper, freezing episodes)

Recommend hip protectors

Assess home safety and functional safety and provide environmental modifications and adaptations

Provide cognitive retraining and training in the use of compensatory strategies

Assist in developing self-management skills (effective communication, positive coping strategies, stress reduction, physical activity and exercise, medication management, healthy eating, and making informed decisions about medical and alternative treatments)

Educate patient and caregivers in Parkinson's Disease, the availability of community resources and encourage participation in support groups

Patient Education:

1. Strategies to Reduce Action Tremor
2. Home Exercise Program Face Sheet
3. Upper Body Reciprocal Exercises
4. Hand Strengthening Exercises
5. Passive ROM and Stretching Exercises
6. Handwriting Techniques for Parkinson's
7. Energy Conservation Principles
8. Energy Conservation with Self Care Activities
9. Energy Conservation with Meal and Home Management
10. Falls Risks Assessment and Prevention Strategies
11. Home Safety and Functional Safety Assessment
12. Stress Management and Relaxation Techniques

Therapist Resources:

1. Facilitating Movement Using Cognitive Strategies